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| 10/566,483 | 01/30/2006 | Takao Saito | 10873.1854USWO | 3585 |

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| EXAMINER |
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REDDY, KARUNA P

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| ART UNIT | PAPER NUMBER |
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1796

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03/28/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | | |
|------------------------------|--------------------------------------|-------------------------------------|--|
| Office Action Summary | Application No. 10/566,483 | Applicant(s) SAITO ET AL. | |
| | Examiner KARUNA P. REDDY | Art Unit 1796 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 January 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>1/23/2008</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This office action is in response to the amendment filed on 1/14/2008.

Applicants amended claim 1 and added claims 14-15. Claims 1-15 are currently pending in the application.

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Rejections - 35 USC § 102

3. Claim 1, 3 and 11-12 are rejected under 35 U.S.C. 102(b) as being anticipated by Nakanishi et al (US 4, 721, 647).

The rejection is adequately set forth in paragraph 2 of office action mailed 7/13/2007 and is incorporated here by reference.

4. Claim 1, 4-5 and 14 are rejected under 35 U.S.C. 102(b) as being anticipated by Takemori et al (US 5, 075, 373).

The rejection is adequately set forth in paragraph 3 of office action mailed 7/13/2007 and is incorporated here by reference. Furthermore, the particle size of water absorbent resin is 100 microns or finer (abstract).

5. Claim 1, 6, 11-12 and 14 are rejected under 35 U.S.C. 102(b) as being anticipated by Suskind et al (US 5, 849, 816).

The rejection is adequately set forth in paragraph 4 of office action mailed 7/13/2007 and is incorporated here by reference. Furthermore, average particle size of the resulting absorbent particles of present invention is preferably in the range of from about 100 microns to about 600 microns (column 10, lines 25-28).

6. Claims 1-3, 11-12 and 14 are rejected under 35 U.S.C. 102(b) as being anticipated by Knack et al (US 5, 002, 814).

Knack et al disclose highly absorbent polymer particulate that can be treated like a powder and yet remain immovable inside the fluffy layer of sanitary articles (column 1, lines 6-68; column 2, line 1). The polymer product features high absorptive capacity and a particulate structure which permits numerous short fibers to be contained within the individual polymer particles (column 2, lines 4-7). The preferred polymer is based on acrylic acid/sodium acrylate and the polymers can be crosslinked (column 2, lines 29-31). The absorbent polymer particles feature in general a particulate size of 1-1000 microns (column 2, lines 36-37). Polymer fibers used are polyolefin fibers, especially polyethylene and polypropylene (column 2, lines 62-64) and read on the hydrophobic substance of present claims. A method of bonding the fiber material to the polymer product consists of placing the fiber material in polymer solution before the polymer material is finished, whereupon a linking reaction occurs. This causes the fibers

to become at least partially enveloped by the polymer product, and in such a way that the fiber ends combine with the insides of the polymer product (column 3, lines 52-58).

Therefore, Knack et al anticipates the present claims.

Claim Rejections - 35 USC § 103

7. Claims 7-10 and 13 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Nakanishi et al (US 4, 721, 647) or Knack et al (US 5, 002, 814).

The discussion with respect to Nakanishi et al and Knack et al in paragraphs 3 and 6 respectively is incorporated here by reference.

Nakanshi et al or Knack et al individually are silent with respect to properties such as water retention amount, liquid permeation rate, absorption time and diffusion absorption amount.

However, in light of the fact that prior art teaches / discloses essentially a similar absorbent resin particle as that of the claimed, one of ordinary skill in the art would have a reasonable basis to believe that the absorbent resin particle of prior art exhibits essentially the same properties. Since PTO cannot conduct experiments, the burden of proof is shifted to the applicants to establish an unobviousness difference. See *In re Fitzgerald*, 619 F.2d 67, 205 USPQ 594 (CCPA 1980).

Even if properties of the absorbent resin particle of instant claims and prior art examples are not the same, it would still have been obvious to one of ordinary skill in the art to make absorbent resin particle having the claimed properties because it appears that the references generically embrace the claimed absorbent resin particle and the person of ordinary skill in the art would have expected all embodiments of the reference to work. Applicants have not demonstrated that the differences, if any, between the claimed absorbent resin particle and the absorbent resin particle of prior art give rise to unexpected results.

8. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Suskind et al (US 5, 849, 816).

The discussion with respect to Suskind et al in paragraph 5 above is incorporated here in by reference.

Suskind et al is silent with respect to wt% of hydrophobic substance, based on a weight of the crosslinked polymer.

However, it is the examiner's position that amount of filler core i.e. hydrophobic substance, is a result-effective variable (MPEP 2144.5) since the amount used clearly affects the hydrophobicity. Hence, the choice of a particular amount of hydrophobic substance (such as the amount in present claims) is a matter of routine experimentation and would have been well within the skill level of, and thus obvious to, one of ordinary skill in the art, specially in light of the

teaching of Suskind which indicates that process may be modified by one skilled in the art without undue experimentation with respect to weight ratio of filler core to polymer (column 10, lines 44-48).

Response to Arguments

9. Applicant's arguments filed 1/14/2008 have been fully considered but they are not persuasive. Specifically, applicant argues that (A) although the absorbent polymer of Nakanishi et al is in the form of substantially spherical particles, the absorbent article in the reference is a web shaped article. These shapes are obviously not a particle shape, which claim 1 requires; (B) Suskind discloses hydrophobic organic materials that are different from hydrophobic substances of the amended claim 1; and (C) claim 1 requires that at least part of the hydrophobic material is contained inside the absorbent resin particle.

With respect to (A), claim 1 recites an absorbent resin particle and not a water absorbent article. The water absorbent polymer of Nakanishi is in the form of spherical particles, as acknowledged by the applicant, which meets the limitation of claim 1.

With respect to (B), hydrophobic organic materials, such as cellulose and starch, disclosed in Suskind contain hydrocarbon groups i.e. cellulose and starch contain carbon and hydrogen atoms and meet the claim limitation of a hydrophobic substance containing hydrocarbon groups.

With respect to (C), it is the examiner's position that, mixing of the water absorbent resin particle and hydrophobic substance results in contact between water absorbent resin particle and hydrophobic substance and thus has a configuration wherein the hydrophobic substance is partially contained in the water absorbent resin particles.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KARUNA P. REDDY whose telephone number is (571)272-6566.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on (571) 272-1119. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Karuna P Reddy/
Examiner, Art Unit 1796

/VASUDEVAN S. JAGANNATHAN/
Supervisory Patent Examiner, Art Unit 1796

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